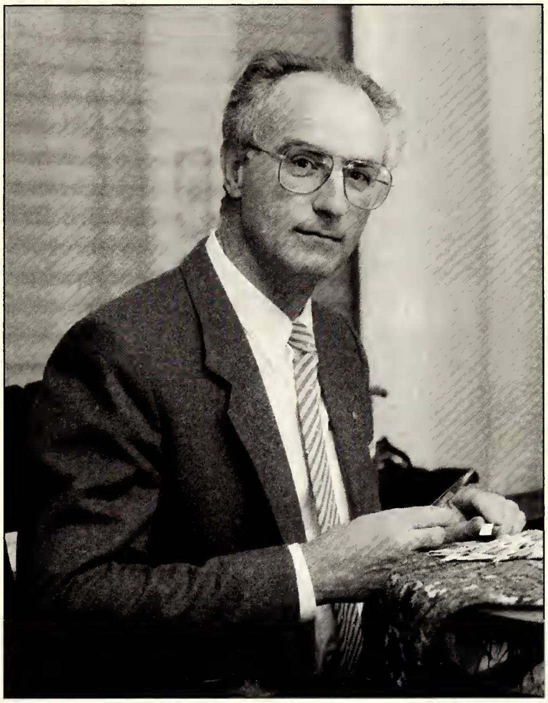


Clas Michael Naumann zu Königsbrück
26.06.1939 – 15.02.2004

On 15th February 2004, Clas Naumann passed away at his home in Wachtberg-Pech, near Bonn, Germany. He had been fighting a severe cancer over the past years, a fight which he ultimately lost just six weeks before his official retirement from the directorship of the Zoological Museum Alexander Koenig at Bonn. With his tragic death we lost an inspiring and truly outstanding friend and colleague, European entomology has lost one of its leading and most influential lepidopterists, and SEL has lost one of its Honorary Members. Clas Naumann is survived by his wife Dr. Storai Naumann zu Königsbrück - Nawabi, and their two children, Alexander and Roxana Naumann.
Clas Naumann was born on 26th June 1939 at Dresden, as the only son of Dr. Eberhard Naumann zu Königsbrück and his wife Freda-Irena Naumann, nee Hannemann. The first years of his life were spent at the family estate at Königsbrück near Dresden, but his early childhood was overshadowed by the raging Second World War, which forced the family to flee Königsbrück, leaving all belongings behind, in early 1945, when Clas was just over five years old. After spending a few years near Hameln and in Wilhelmshaven, the family eventually found a new home at Braunschweig, where his father could work with the forestry service. Eberhard Naumann, a forester, devoted general naturalist, and keen beetle collector, successfully

planted the seeds during his son's youth for the joy and rewards of observing and studying natural history. During his years as a school boy Clas' early interests in nature, especially in insects, were reinforced by contacts with local entomologists, such as the late Fritz Hartwieg, author of a comprehensive regional study of the Lepidoptera of the Braunschweig area (Hartwieg 1958). This and other important contacts soon rendered butterflies and moths Clas Naumann's prime objects of study. His very first publication which appeared while he was still in high school thus dealt with his Lepidoptera findings during a summer holiday spent with his parents in 1956 near Maria Taferl in Austria (Naumann 1958).

Following his high school graduation, he moved in 1959 to Tübingen in southern Germany to attend for one year the local "Leibniz-Kolleg" and then to enrol at the university. Firstly studying chemistry, but without genuine interest in the matter, he soon changed his main subject to biology where his real interests had already been for some time. It was during his student years at Tübingen, an area still very rich in insects in those days, when his interests in Lepidoptera became finally focussed on Burnet Moths, specifically the genus *Zygaena*. With his open and outgoing attitude, he soon made contact with the leading Zygaenidae specialists at the time, notably Burchard Alberti and Hugo Reiss. At Hugo Reiss's home in nearby Stuttgart, he was able to admire for the first time a large comprehensive collection exclusively made of Burnet Moths, which left a lasting impression on the young student and keen collector he had become by that time. Already in 1966, in his second entomological publication, he described a new Burnet species from southern Turkey, *Zygaena problematica* Naumann, 1966, following a three month collecting expedition to Eastern Turkey which he had planned himself and jointly undertaken with a fellow undergraduate biology student from Tübingen university. Despite a lasting broader interest in Lepidoptera, and, later as a zoologist, with a solid background from classical training leading to general appreciation of all organisms much beyond insects and arthropods, his own group remained the Zygaenidae, with a life long obsession for the red-coloured Burnet Moths of the genus *Zygaena*.

After obtaining his biology degree from the Eberhard-Karls University at Tübingen, he moved to the University of Bonn for his dissertation, where Günther Niethammer, a renowned ornithologist and systematic biologist, became his supervisor. Not being allowed to work for his Ph.D. on Zygaenidae, his "hobby group", the Sesiidae were chosen to be the subject of his thesis, a work which turned into a full phylogenetic analysis of the Holarctic Sesiidae (Naumann 1971). This thorough study applied for the first time consistently and successfully the principles of phylogenetic systematics, as recently formulated by Willy Hennig (1966), towards a revision of a larger group within the Lepidoptera. Being at the forefront of systematic research at the time, his thesis was subsequently translated into English (Naumann 1977a). He kept a lifelong interest in Clearwing Moths, which led him much later to take on the editorship for a comprehensive and fully illustrated treatise of Palaearctic Sesiidae as a first volume of a new handbook series (Spatenka et al. 1999).

Following the completion of his Ph.D. thesis and its successful defence in January 1970, he took up an opportunity through a partnership between the Universities of

Cologne, Bochum, and Bonn, and the University of Kabul to enlist for an academic exchange program with Afghanistan, a country which had fascinated him already as a school boy and student by reading classical travel literature from the 19th century. For his postdoc years Clas Naumann thus went as a guest lecturer in zoology to Kabul University, where it was one of his several, partly self appointed duties to build up a zoological collection and a small museum for the university. The three years he spent in Afghanistan became most influential for his further professional and personal life, and lasted in a lifelong affection for that remote country, her people and nature. He already had acquired a predilection for the Middle East and Central Asia as that part of the Palaearctic region with the largest and least explored high mountain areas and home of a highly specialised but still surprisingly diverse fauna and flora. By quickly learning the language and adopting to the culture of his host country, he made good use of his stay by organising and engaging in a series of excursions and extensive field work throughout Afghanistan, which brought him to such remote areas as Nuristan and Registan, the provinces of Badakhshan and Paktia, as well as to the Wakhan Valley in the Afghan Pamirs (Naumann 1974a). These field trips and expeditions, apart from many surprise findings for different groups of animals and plants (e.g., Naumann & Niethammer 1973), also led to the discovery of a number of new *Zygaena* taxa, including one new species (Naumann 1974b, 1977b).

With the overthrow of the former Royal Afghan government in 1973, which later led to a military coup, the invasion of the country by the Soviet Union, and a raging civil war until recent times, a continuation of his stay and especially field work became increasingly difficult. After he returned to Germany, Clas Naumann first moved back to Bonn but then took a position as lecturer for zoology at the University of Munich in 1975. He continued to work up the many results and collections from his Afghanistan field studies, which he also generously shared with many colleagues and specialists for study and publication (e.g., Aussem 1980; Eisner & Naumann 1980; Efetov 1994). His personal affection for Afghanistan also turned into a permanent relationship for his private life by marring in 1974 Storai Nawabi, an Afghan zoologist who had come to Bonn university with the same academic exchange program which had brought him to Kabul. Their happy marriage and Storai's strong and continued support for his studies were a major contributing factor for Clas Naumann's later academic career, which he admitted on many occasions.

In 1977, a professorship for a newly established section for morphology and systematic zoology at the University of Bielefeld became available, for which Clas Naumann successfully applied. After establishing the new section with all laboratories and facilities literally from an empty office space, he soon assembled a young and increasingly active research team. Under his supervision and leadership a growing number of students received their training and graduated, which also yielded a series of studies on different aspects of Zygaenid morphology and ecology covering a wide array of complementary approaches from larval morphology and ultrastructure (Bode & Naumann 1987; Naumann & Feist 1987; Franzl et al. 1988; Naumann 1988) to chemical ecology (Priesner et al. 1984; Witthohn & Naumann 1987; Ockenfels et al. 1993), as well as behavioural and population genetic studies (Hille & Naumann

1992; Heine & Naumann 1994), without neglecting at the same time classical natural history, taxonomy, and faunistics (Naumann & Naumann 1980; Tremewan & Naumann 1989; Naumann et al. 1993; Naumann 2003). The studies and theses undertaken under his supervision were by no means restricted to the genus *Zygaena*, but also dealt with other Lepidoptera taxa outside the Zygaenidae (Rammert 1987; Häuser et al. 1993; Speidel et al. 1996). In his mind all singular results could be usefully brought together to resolve the phylogeny of the group of interest, in his case the Zygaeninae (Naumann 1977c, 1985, 1990; Naumann et al. 1999). He considered the analysis of phylogenetic relationships an essential pre-requisite for attempting to understand the evolution of a group, which he regarded as the ultimate scientific goal. Such a highly integrative approach cannot be achieved by pursuing only short term projects, and it was his reason for choosing to become a specialist for a single group of Lepidoptera in the long term. While at Bielefeld, he also initiated a series of international workshops on Zygaenidae which is still continued today, several of which were published as separate proceedings or as series of important papers by many of the contemporary specialists in the field (e.g., Dutreix et al. 1992; Tremewan et al. 1999).

In 1988 he successfully applied for the vacant position of director of the Zoological Museum Alexander Koenig at Bonn, the institution in which he had already worked as a Ph.D. student, and he was appointed on 1st July 1989. The museum had been struggling at the time through a rather difficult period, and the directorship was now linked to a newly established chair at the University of Bonn, which effectively meant to unite two jobs in one position. Clas Naumann mastered this challenge, and gradually turned the museum into a lively part of the university and an attractive place for graduate students in zoology, without losing out on any of the museum's genuine tasks and obligations (Naumann 1999). For his own research he continued to actively apply emerging techniques and new approaches, and under his hands the museum obtained new laboratories for biochemical analysis, and, more recently, for nuclear sequencing techniques. He still maintained his own focus on Burnet Moths, but apart from the application of new methods he also widened his geographic focus, now concentrating on relatives of the genus *Zygaena* from the Afrotropical region (Naumann & Edelmann 1984; Klütsch et al., in press).

Clas Naumann was a practising entomologist by conviction, and throughout his life he always kept some time for field work, breeding, and looking after his collection. He took much joy in discovering a population or specimens of a rare species in the field, in breeding some *Zygaena* life stock at home, in dissecting newly obtained specimens in the laboratory, as well as in re-arranging his own collection of Burnet Moths, the latter activity usually happening only late at night or during weekends. For much of what he did for entomology he was also driven by aesthetic motives, for which one can clearly see evidence in the way he set specimens, took photographs, prepared illustrations for presentations and publications, or even just prepared specimen labels. He was also keen to collect books and kept a private library of many rare entomological publications, even including complete runs of many journals meticulously bound in perfect shape.

An essential part of all his entomological activities were excursions and field work, which he often referred to as the most delightful part of the entomological business. His personal quest to possibly encounter and study all known *Zygaena* species and close relatives in their natural habitats took him to practically all countries and regions in central and southern Europe, northern Africa, the Middle East and Central Asia, but also to India, China, Japan, Saudi Arabia, Yemen, Ethiopia, Kenya, and South Africa. He often took students or colleagues along for those fields trips, and the author particularly remembers several joint expeditions targeting single *Zygaena* species known from isolated high mountain ranges in Iran and northern Pakistan in 1979, 1980, and 1982, during which often several days or weeks had to be spent without seeing a single Burnet Moth. It also has to be mentioned, however, that several close relationships developed during such expeditions and field trips, particularly with colleagues also interested in Zygaenidae, were discontinued by him during the later years of his life, often without much apparent reason. The ever increasing workload in his job leaving himself with less time for field work and research, and the beginning affects of his illness might have contributed to such discontinued cooperation, an attitude otherwise totally untypical for Clas Naumann.

Aside from pursuing his own scientific interests, Clas Naumann was always ready to generously come to the support of fellow researchers and entomologists in need of help. After a catastrophic flooding which destroyed literally over night almost the complete natural history holdings and library of the Museum Ferdinandeum of Innsbruck in August 1985, he immediately initiated and carried through a successful donations campaign ("Entomologen helfen Tirol – Entomologists in support of Tyrol"). Apart from bringing together substantial funds and in-kind support from many private and institutional sources to help quickly restock part of the institutional library and collection facilities, the success of this international initiative also helped to eventually convince the provincial government of Tyrol to invest in new facilities for the museum leading to a new building for the natural history collections. More recently, following the end of the Taliban regime in Afghanistan, Clas Naumann engaged himself immediately in fund raising and in rallying support to help rebuild Kabul university, for which he also re-activated the long dormant partnership with his own university in Bonn. Already weakened by his terminal illness he travelled twice to Kabul in 2002 and in 2003 to personally deliver the funds raised and to find out on the most urgent needs on the spot.

Many entomologists, particularly from Eastern Europe, also benefited from Clas Naumann's tireless efforts in providing private or institutional support. Following two visits to the Zoological Institute in St. Petersburg in 1992 and 1993, he voluntarily took over the membership administration for foreign members of the Russian Entomological Society in 1993. Largely due to his voluntary work and promotion of membership in Western Europe and oversees which yielded a stable income of hard currency, the society could continue the production of its journal "Entomologitsheskoje Obozrenie" and thus could survive economically the difficult first years after "Perestroyka." The Russian Entomological Society paid tribute to these efforts by electing Clas Naumann an Honorary Fellow in 1994.

Having joined SEL already in 1977, Clas Naumann was actively involved in the society for a long time. He was a regular participant, presenter, and chairman at several of SEL's European Congresses of Lepidopterology, and he was elected an SEL Honorary Member in 2000 (see also, SEL News 33: 17). He had been approached many times whether to take on a position within SEL Council, but he always declined to be nominated by saying he could only seriously consider a nomination after his retirement.

As a result of his outstanding reputation, he served on numerous academic and administrative boards and committees, such as in the permanent review panel for zoology for the German Research Foundation (DFG) from 1993 to 2000, as well as on the Council of the German Zoological Society (DZG) from 1987 to 1994, and he was a much sought expert for various ad hoc review panels and visiting groups assessing many national and international scientific institutions. Apart from his time in Kabul, he also held visiting short term lecturerships at the Universities of Moscow, Kyoto, Marseille, and Tehran, as well as one from the Scandinavian Entomological Societies. In addition to regularly reviewing manuscripts for Nota lepidopterologica as well as many other journals, he was directly involved in the editorship of several entomological journals and publication series. In 1999 he took on the task of managing editor for the "Entomologische Zeitschrift", the oldest existing non-professional entomological journal published in German, a position which he actively fulfilled until the end of 2003 (e.g., Naumann 2003). For his many contacts and generous sharing of information and material, the names of several new taxa from different groups were dedicated to his memory, including two species of Sesiidae (*Lenyra naumanni* Arita, 1989; *Dipchasphecia naumanni* Gorbunov, 1991), and two Zygaenidae (*Adscita naumanni* Efetov, 1994; *Zygaena naumanni* Hille & Keil, 2000).

Apart from his many scientific contributions and lasting achievements as an entomologist, Clas Naumann will perhaps mostly be remembered by his immensely positive, open, always interested, and most constructive attitude towards other colleagues, and especially students. These facets of his character, in combination with an enormous energy, hardly anyone could resist upon first encounter. Through his constantly inspiring, moving, and supporting students and colleagues, he became probably more influential to European entomology than by his scientific work alone. With this loss of a great character and personality, the entire scene of European Lepidopterists has suffered, but we will truly remember Clas Naumann as one of its most motivating members.

Clas Naumann's private Lepidoptera collection of more than 60.000 specimens, mostly of the genus *Zygaena*, was bequested to his former institution, the Museum Alexander Koenig in Bonn, where it will eventually be housed in a new building for the entire entomological department now under construction, which will carry his name. A more comprehensive obituary of Clas Naumann's academic life including a complete list of his publications will appear in a special forthcoming issue of the "Bonner Zoologische Beiträge," the main journal published by the Zoologisches Museum and Forschungsinstitut Alexander Koenig. His list of publications containing more than 150 titles will not be reprinted here, but a number of selected contributions is included

below. Further obituaries for Clas Naumann have been or will be published shortly in issues of "Entomologische Zeitschrift" and "Decheniana".

For the compilation of this obituary, I would like to acknowledge the most helpful support received from Christoph Esch (Münster), Axel Hofmann (Breisach), Niels P. Kristensen (Copenhagen), Bernard Landry (Genève), Storai Naumann-Nawabi (Wachtberg-Pech), Michael Schmitt (Bonn), Axel Steiner (Stuttgart), Gerhard Tarmann (Innsbruck), and Thomas Wagner (Koblenz). The photo of Clas Naumann has been taken by Christoph Esch in 1989.

Christoph Häuser

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